



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
REPORT OF EXAMINATION
To Appropriate Public Waters of the State of Washington

APPLICATION DATE May 1, 1996	APPLICATION NO. G2-29382
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NAME Lake Cushman Maintenance Company		
ADDRESS/STREET 3740 North Lake Cushman Road	CITY/STATE Hoodsport, Washington	ZIP CODE 98548

PUBLIC WATERS TO BE APPROPRIATED		
SOURCE Two existing wells, one or more additional new wells		
TRIBUTARY OF (IF SURFACE WATERS)		

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 560 ¹	MAXIMUM ACRE-FEET PER YEAR 158 ²
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QUANTITY, TYPE OF USE, PERIOD OF USE Multiple Domestic
¹ 160 gallons per minute is additive
² 128.9 acre-feet per year is additive

LOCATION OF WITHDRAWAL					
APPROXIMATE LOCATION OF WITHDRAWAL Well 2 (AHB683): 100 feet North and 625 feet West from the center of Section 18, T. 23 N., R. 04 W. W.M. Well 10 (AHB682): 300 feet South and 560 feet West from the center of Section 18, T. 23 N., R. 04 W. W.M.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) SE ¼ of the NW ¼ (Well 2) NE ¼ of the SW ¼ (Well 10)	SECTION 18 18	TOWNSHIP 23 N. 23 N.	RANGE 04 W. W.M. 04 W. W.M.	WRIA 16 16	COUNTY Mason Mason
PARCEL NUMBER 423185100148 (Well 2) 423185100148 (Well 10)	LATITUDE 47°29'03.5" 47°28'59.5"	LONGITUDE 123°14'45.3" 123°14'44.2"	DATUM WGS84 WGS84		

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED [Attachment 1 shows location of the authorized place of use and point(s) of diversion or withdrawal.]
The place of use of this water right is the service area described in the most recent Lake Cushman Maintenance Company Water System Plan for Lake Cushman System 3 approved by the Washington State Department of Health, so long as the Lake Cushman Maintenance Company is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.
If the criteria in RCW 90.03.386(2) are not met, the place of use of this water right reverts to the last place of use described by Ecology in a water right authorization.

DESCRIPTION OF PROPOSED WORKS

Lake Cushman System 3 water system consists of 60,000 linear feet of pipe smaller than 4-inch-diameter, 58,400 linear feet of 4-inch-diameter pipe; 14,600 linear feet of 8-inch-diameter pipe; 102,800 gallons of storage and two wells (Wells 2 and 10). Water is pumped and pressure-fed to residences. There are 479 connections expected by the year 2050 and 350 are currently served.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
Begun	2020	2020

PROVISIONS

The total amount authorized for withdrawal from two existing wells and one or more new wells under Ground Water Right Permit Number G2-29382P shall be limited to 560 gallons per minute; 158 acre-feet per year.

This authorization is subject to the following conditions:

The total withdrawal under this Permit G2-29382P, and water right certificates G2-01036C and G2-27597C and permit G2-29382P shall not exceed 560 gallons per minute or 158 acre-feet per year.

An approved measuring device shall be installed and maintained for each of the sources authorized by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173. <http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>

Water use data shall be recorded monthly. The maximum rate of withdrawal and the annual total volume shall be submitted to the Department of Ecology by January 31st of each calendar year.

WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the water right. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right permit by this department does not convey a right of access to, or other right to use, land which the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.


FINDINGS OF FACT AND ORDER

Upon reviewing the investigator's report, I find that all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find that the appropriation of water as recommended will not be detrimental to existing rights or to the public interest.

Therefore, I ORDER the approval of Application No. G2-29382 subject to existing rights and the provisions specified above.

Signed at Olympia, Washington, this 14th day of July 2011.

Sincerely,


Michael J. Gallagher, Section Manager

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

- Please send a copy of your appeal to:

Michael J. Gallagher, Section Manager
Water Resources Program
Southwest Regional Office
P.O. Box 47775
Olympia WA 98504-7775

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

INVESTIGATOR’S REPORT

BACKGROUND

The Lake Cushman Maintenance Company’s (LCMC) Lake Cushman System 3 (Washington Department of Health Water System ID# 03528F) water system is a residential development along the east shoreline of Lake Cushman approximately 5 miles northwest of Hoodspport, Washington. The service area for Lake Cushman System 3 covers approximately 479 lots. Currently there are approximately 350 active connections. LCMC submitted a Ground Water Application and was assigned application number G2-29382 and priority date of May 1, 1996. The application requested an Instantaneous Quantity (Qi) of 560 gpm in addition to their existing Certified Ground Water Rights under G2-01036C (300 gpm and 29.1 acre-feet per year) and G2-27597C (100 gpm and 28.7 acre-feet per year supplemental to existing rights).

Attachment 1 shows the location of the two LCMC wells and the approximate locations of nearby domestic water-supply wells. Well 2 is located approximately 40 feet east of Lake Cushman at an elevation of approximately 749 feet MSL. Well 10 is located approximately 400 feet south of Well 2 and approximately 110 feet east of Lake Cushman at an elevation of approximately 750 feet MSL. If additional wells are drilled, they will be located in the same ¼ ¼ sections advertised in the public notification for Wells 2 and 10 (respectively, the SE¼ NW¼ and NE¼ SW¼ of Section 18).

Project Description

For the subject Application, LCMC proposes to withdraw groundwater from two existing wells to provide a water supply for Lake Cushman System 3. A summary of the Ground Water Right Application G2-29382 is presented in Table 1.

Table 1. Summary of Application No. G2-29382.

Attributes	Proposed
Applicant	Lake Cushman Maintenance Company
Date of Application	May 1, 1996
Instantaneous Quantity	560 gallons per minute (160 gpm additive)
Annual Quantity	158 acre-feet (128.9 acre-feet additive)
Sources	Existing Wells 2 and 10
Points of Withdrawal	SE ¼ of NW ¼ of Sec. 18, T. 23 N., R. 04 W. W.M. NE ¼ of SW ¼ of Sec. 18, T. 23 N., R. 04 W. W.M.
Purpose of Use	Multiple Domestic
Period of Use	Continuous
Place of Use	Lake Cushman System 3 Service Area

This application is one of two water right applications filed by LCMC in Mason County, Washington, as summarized in Table 2. LCMC also submitted Ground Water Right Application G2-29383 for 2,860 gpm for their Lake Cushman System 5 (Washington State Department of Health Water System ID # 03530L), located south of Lake Cushman System 3. Four applications originally submitted individually were combined into Application G2-29383 to reflect the merging of multiple systems into Lake Cushman System 5 and to simplify the processing of the applications.

Table 2. Summary of Lake Cushman Maintenance Company Applications.

Project	Control Number	Purpose of Use	Priority Date	Quantity	Points of Withdrawal Locations	Sources
Lake Cushman System 3	G2-29382	Domestic Multiple	5/1/1996	560 gpm	22N/4W-18	Wells 2 and 10
Lake Cushman System 5	G2-29383	Domestic Multiple	5/1/1996	2,860 gpm	22N/4W-4, 5, 9, 16 23N/4W-29	Wells 1, 3, 4, 5, 7, 8, 9, and 11

Legal Requirements for Application Processing

The following requirements must be met prior to processing a water right application:

- **Public Notice (RCW 90.03.280)**
A public notice of the application must be published in a local newspaper once a week for two consecutive weeks (RCW 90.03.280). The public notice of application G2-29382 was published in the Shelton-Mason County Journal during the weeks of December 19 and December 26, 2002.
- **State Environmental Policy Act (SEPA)**
The subject water right is not subject to SEPA [WAC 197-11-305 and WAC 197-11-800(4)] because the instantaneous quantity is less than the threshold of 2,250 gallons per minute.
- **Water Resources Statutes and Case Law**
Chapters 90.03 and 90.44 RCW authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights. Laws governing the water right permitting process are contained in RCW 90.02.250 through 90.03.050. In accordance with RCW 90.02.290, determinations must be made on the following four criteria in order for an application for water rights to be approved:
 - Water must be available;
 - There must be no impairment of existing rights;
 - The water use must be beneficial; and
 - The water use must not be detrimental to the public interest.
- **Administrative Status of Surface Water Bodies**
Surface water bodies in the region are subject to administrative regulations governing the right to withdraw water for beneficial use. Minimum instream flow regulations for the Skokomish-Dosewallips watershed (Water Resource Inventory Area [WRIA] 16) have not been adopted. Administrative rules

have been proposed in Washington Administrative Code (WAC) Chapter 173-516 in 1985. Closure of the North Fork Skokomish to further water right allocations was proposed.

Currently, no minimum instream flows or basin closures have been set for WRIA 16 by Ecology. However, instream flow studies have been conducted related to watershed planning in WRIA 16 (Aspect Consulting, 2005). In addition, Watershed Planning Phases 1 through 3 have been completed, including a Draft Level 1 Assessment and a Watershed Management Plan.

INVESTIGATION

The examination of Ground Water Right Application G2-29382 was led by consultants from GeoEngineers, Inc. contracted as part of the Department of Ecology’s (Ecology’s) cost reimbursement program to facilitate the phased processing of the application. Phil Crane, of the Water Resources Program, Southwest Region, Ecology, oversaw the examination and also provided review.

The investigation included, but was not limited to, the review of:

- The State Water Code, specifically WAC 173 and RCW 90.
- Ecology water right files.
- Ecology, 2010, Washington State Well Log Viewer website. <<http://apps.ecy.wa.gov/welllog/index.asp>> (Accessed June 2010).
- Ecology, 2010, Water Rights Tracking System (WRTS) website. <<http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html>> (Accessed January 2010).
- Washington State Department of Health, 2010, Office of Drinking Water Find Water Systems website <<https://fortress.wa.gov/doh/eh/portal/odw/si/Intro.aspx>> (Accessed June 2010).
- United States Geological Survey (USGS) topographic maps.
- Aspect Consulting, 2005, WRIA 16 Instream Flow Studies, Jefferson and Mason Counties, Washington. Prepared for WRIA 16 Planning Unit. <http://www.ecy.wa.gov/programs/eap/wrias/Planning/docs/wria16_isf_122305.pdf>
- Aspect Consulting, 2009, River and Stream Impairment Analysis, WRIA 16 and 14b, Skokomish-Dosewallips Planning Area. Prepared for WRIA 16 Planning Unit. <http://www.ecy.wa.gov/programs/eap/wrias/Planning/docs/wria16_ir_63009.pdf>;
- Golder Associates, Inc. and Economic & Engineering Services, Inc., 2002, Draft Skokomish-Dosewallips Watershed (WRIA 16) Phase II – Level 1 Assessment, Data Compilation and Preliminary Assessment. Prepared for WRIA 16 Planning Unit Steering Committed, Shelton, Washington. <<http://www.ecy.wa.gov/biblio/0306014.html>>
- Tabor, R.W. and Cady, W.M., 1978, Geologic map of the Olympic Peninsula, U.S. Geological Survey Miscellaneous Investigations Map 994, scale 1:125,000.
- Molenaar, D. and Noble, J.B., 1970, Geology and related ground-water occurrence, southeastern Mason County, Washington: Washington Department of Water Resources Water-Supply Bulletin 29, 145 p., 2 plates.
- Washington State Department of Natural Resources (DNR), 2010, Washington Interactive Geologic Map. <<http://wigm.dnr.wa.gov/>> (Accessed June 2010)
- WRIA 16 Planning Unit, 2006, Watershed Management Plan Skokomish-Dosewallips Water Resource Inventory Area (WRIA 16) including the WRIA 14 South Shore Sub-Basin. <http://www.ecy.wa.gov/programs/eap/wrias/Planning/docs/WRIA%2016%20Draft%205_lo_res.pdf>;
- Information submitted by and conversations and/or meetings with Randy Bruff of LCMC and Trent Loughheed of JW Morrisette & Associates Inc.
- Settlement Agreement for the Cushman Project, Cushman Project FERC Project No. 460, January 12, 2009. <<http://www.mytpu.org/files/library/cushman-dam-settlement.pdf>>
- A site visit on May 17, 2010.

Site Visit

Joel Purdy, a Senior Hydrogeologist with GeoEngineers, conducted a site visit on May 17, 2010. Randy Bruff of LCMC gave a tour of the facilities and property. The tour included the inspection of the Wells 2 and 10, their pump houses and wellheads. Both wells are located within wooden well houses that were found to be clean and well maintained. GeoEngineers took photographs of the wells, recorded Ecology well tag ID numbers, and recorded flow meter readings. Neither Well 2 nor Well 10 was pumping at the time of the visit. A summary of well construction details are provided below in Table 3.

Table 3. Well construction details for Points of Withdrawal for G2-29382.

Source	Date Drilled	Total Depth Drilled (feet)	Screened interval (feet)	Pumping Test Rate (gpm)	Current Pumping Rate Capacity (gpm)	Diameter (inches)
Well 2	1966	222	95 - 110	100	103	8
Well 10	10/04/1989	164	150 - 162	289	117	8

Existing LCMC Water Rights

LCMC has been allocated two existing certificated water rights associated with the Lake Cushman System 3. These rights are summarized in Table 4.

Table 4. Summary of Existing Lake Cushman Maintenance Company System 3 Water Rights.

Control Number	Priority Date	Qi (gpm)	Additive Qa (ac-ft/yr)	Non-Additive Qa (ac-ft/yr)	Source
G2-01036C	5/28/1970	300	29.1	--	Well 2
G2-27597C	8/16/1989	100	--	28.7	Well 10

LCMC has a total instantaneous quantity (Qi) allocation of 400 gpm from the two wells listed in Table 4, based on water right documents. It appears that LCMC has an annual quantity (Qa) of 29.1 acre-feet from their first right (G2-01036C) and the Qa for the second right (G2-27597C) is non-additive. Therefore, LCMC’s total Qa is 29.1 acre-feet.

Hydrologic/Hydrogeologic Evaluation

The project site lies on southeastern Olympic peninsula, adjacent to Lake Cushman, near the town of Hoodspport, Washington. The subject application is related to Lake Cushman System 3 project located on the east shoreline of Lake Cushman within the Skokomish-Dosewallips WRIA 16.

Geology

The geology of the general project area is depicted by DNR on their website. The geology in the North Fork headwaters generally consists of Tertiary volcanic and sedimentary bedrock (DNR website, 2010). Characterization of the geology and hydrogeology of southeastern Mason County was conducted by Molenaar and Noble (1970). Although the study area did not include the area near the groundwater point of withdrawal at the Lake Cushman System 3, much of the general descriptions of characteristics of principal stratigraphic units in the area apply to the site.

Recent unconsolidated alluvium as well as deposits of alpine glaciations occurs along the North Fork Skokomish River valley floor and along the Lake Cushman shoreline. Near Lake Cushman, unconsolidated deposits formed as the result of erosional and depositional events during multiple glaciations. The last glaciation occurred during the Ice Age approximately 15,000 years ago, known locally as the Vashon Stade of the Fraser Glaciation.

The geologic history of the Hoodspport area results in complex layering of unconsolidated deposits (stratigraphy) overlying the primarily volcanic bedrock. The typical sequence for Mason County, from youngest to oldest, is alluvium, Vashon recessional outwash, Vashon till, and Vashon advance outwash, underlain by older glacial, non-glacial deposits and the Tertiary bedrock. These deposits are described in Molenaar and Noble (1970) as follows:

- **Alluvium:** Fine-grained silt and sand, with some clay and peat. This unit is found in river valleys (e.g., the North Fork Skokomish River valley), lowland floodplains, and near the mouths of valleys of the larger streams that flow into Hood Canal.
- **Vashon recessional outwash:** Discontinuously bedded loose gravel with some sand, silt and clay. It overlies till in depressions on drift plains and deltaic bedding along north sides of some valleys. This unit is not mapped in the Lake Cushman vicinity.
- **Vashon till:** Coarse cobbles in silt-clay matrix. This unit extensively mantles drift plains and generally occurs at surface in the central portion of the east shoreline of Lake Cushman.
- **Vashon advance outwash:** Unconsolidated gravel, sand and silt. This unit is generally exposed in the Lake Cushman vicinity within the walls of the incised valley of Big Creek, which drains to Lake Cushman, and the valleys streams located several miles to the east.
- **Older unconsolidated deposits:** Deposits beneath the Vashon units found in the Hoodspport vicinity include: the Kitsap formation, a non-glacial unit of horizontally bedded silt and fine sand, with some clay and peat occurring near sea level along Hood Canal; Salmon Springs Drift, a pre-Vashon glacial deposit of coarse sand, gravel and some till; and undifferentiated deposits found generally beneath sea level. These deposits are not mapped in the Lake Cushman vicinity.
- **Tertiary bedrock:** Basalt of the Crescent Formation likely occurs at depth beneath the unconsolidated deposits. Exposures of basalt occur to the north and east of the Lake Cushman System 3 vicinity.

Hydrogeology

In the vicinity of Lake Cushman, the source for groundwater supply is either shallow unconsolidated alluvium and glacial deposits or the bedrock. For the subject application, the following is a general description of aquifers that may be potential sources:

- **Unconsolidated Aquifer:** This aquifer is found predominantly within the permeable layers of alluvium and Vashon glacial deposits that occur at the surface. The aquifer is unconfined and assumed to be in hydraulic continuity with Lake Cushman based on groundwater level fluctuations that correspond with lake level changes. Static water levels are generally at a similar elevation as lake levels. Infiltration of precipitation, as well as exchange with Lake Cushman, is an additional source of recharge to the unconsolidated aquifer. Wells 2 and 10 are completed in this aquifer.
- **Bedrock Aquifer:** Basalt of the Crescent Formation is encountered below the unconsolidated deposits aquifer in the vicinity of the subject application. The Crescent Formation is a thick sequence of submarine and columnar basalt that is exposed along the shoreline of Lake Cushman north of Wells 2 and 10. The basalt forms a regional aquifer that is used for relative minor amounts of water supply for domestic purposes. Infiltration of precipitation and exchange with Lake Cushman are the sources for recharge to the Bedrock Aquifer.

As part of the investigation of subsurface conditions, Ecology Water Well Reports (well logs) in the general vicinity of the LCMC application were downloaded from Ecology's Well Log Viewer website. We have reviewed well logs of nearby wells and hydrogeologic information regarding the site vicinity, including the previously discussed sources. The following is a summary of the water sources and hydrogeology in the area:

- Subsurface unconsolidated deposits are typically composed of glacial and non-glacial deposits. The deposits consist of layers of sand and sand and gravel and separated by finer grained layers of silt and clay.
- The unconsolidated aquifer is unconfined at Wells 2 and 10 based on information reported on the Well 10 log.
- The nearest wells to Wells 2 and 10 are located approximately 1 mile southeast at Lake Cushman State Park. Two wells are completed in the unconsolidated aquifer at depths of 113 and 154 feet below ground surface and were tested at rates between 37 and 60 gpm.
- No wells in the vicinity are completed in the Bedrock Aquifer.
- The movement of groundwater in the vicinity of the subject application is generally from upland areas toward Lake Cushman.

Hydrogeologic Characteristics

A pumping test was conducted for Well 10 on October 4, 1989. Well 10 was pumped at a rate of 289 gpm and had a total drawdown of 17.17 feet after 17.5 hours. It appears that the drawdown stabilized within the first 2 hours of pumping after apparent pumping rate adjustments. Because of the apparent pumping rate adjustments made during the first two hours of pumping, an aquifer transmissivity of the source aquifer could not be accurately estimated from the drawdown plot. The specific capacity of 16.8 gpm/foot of drawdown (289 gpm divided by 17.17 feet) implies a relative high transmissivity ranging from 25,000 to 35,000 gpd/ft (3,300 to 4,700 ft/day). However, the drawdown will likely be limited since the aquifer is hydraulically connected to Lake Cushman, which may lead to an over-estimation of the aquifer transmissivity.

There are no other available pumping test data to aid in the characterization of the properties of the aquifer at Well 2. It was reported on the well log that a 100-gpm bail test was conducted with no drawdown.

Shallow groundwater in the vicinity of Wells 2 and 10 likely flows toward Lake Cushman and the unconsolidated aquifer discharges to Lake Cushman. Groundwater levels fluctuate with lake levels as indicated by limited historical water levels reported on well logs for wells drilled at different years and times of the year.

Projected Demand

According to information provided by JW Morrisette & Associates Inc., System 3 is projected to serve 479 lots by the year 2050. Using an annual consumption of 0.33 acre-feet per connection, the projected annual demand is 158 acre-feet per year.

Area of Influence

The area of influence for application G2-29382 is likely small based on the direct continuity with Lake Cushman and the high aquifer transmissivity. The boundaries of the area of influence were conservatively estimated based on the drawdown cone likely to develop within an unconfined aquifer adjacent to a positive recharge boundary. We conservatively used a 0.5-mile radius as the area of influence extending in an arc eastward (inland) of the well locations. There are no known wells within the 0.5-mile radius. Wells 2 and 10 have been operating at a combined rate of 220 gpm and other wells located more than a mile away have not been known to show drawdown interference as a result of the pumping from Wells 2 and 10.

Impairment Considerations

It is expected that the withdrawals by the applicant related to Wells 2 and 10 would be from the unconsolidated aquifer that is in hydraulic continuity with Lake Cushman. The areal extent of aquifer is controlled by the occurrence of bedrock, which is exposed at surface about 1,500 feet east of the source wells and approximately 1 mile to the north on the shoreline of Lake Cushman. Because of the distance from the known nearby wells and the proximity to the recharge source of Lake Cushman, the potential for drawdown interference caused by the pumping of Wells 2 and 10 is minimal. Thus, there will be no impairment of existing rights.

The North Fork Skokomish River water budget for release from the Cushman Hydroelectric Project is established under a comprehensive Settle Agreement dated January 12, 2009. The Settlement Agreement between Tacoma Power and other entities that hold stakes in the water, habitat and environment resources of the North Fork Skokomish River has led to several plans and strategies to preserve and monitor the water resources. In the Settlement Agreement, the project is required to release 160,000 acre-feet per year to the lower reaches of the river.

The Settlement Agreement includes several elements and plans to reduce and mitigate potential impacts as a result of the project. No impairment of the ability of the Cushman Hydroelectric Project to meet the established water budget requirements is expected from the pumping of Wells 2 and 10.

Potential for Impairment of Existing Rights

The nearest existing water rights are associated with the water supply for the Lake Cushman State Park facilities, located over 1 mile southeast of Wells 2 and 10. A summary of the existing water right documents is shown below in Table 5.

Table 5. Summary of Existing Water Rights.

Owner	Control Number	Priority Date	Qi (gpm)	Qa (ac-ft/yr)	Purpose of Use	Location
Tacoma PUD	G2-00919CWRIS	8/13/1962	45	17	Domestic Multiple	T23N/R04W-20K
WA Parks & Recreation Commission	G2-25111CWRIS	9/29/1978	60	1.5	Domestic Multiple, Recreation	T23N/R04W-20F

None of the water rights listed in Table 5 will be impaired by the pumping of Wells 2 and 10 because of their distance from Wells 2 and 10.

There are no claims in the vicinity of Wells 2 and 10.

There is one surface water right application that is senior to the LCMC application. Surface water right application S2-29274 was submitted by Richard Haynie on August 23, 1995 for 0.02 cfs from an unnamed spring. Haynie agreed to be skipped during this cost reimbursement processing as stated in a document signed July 20, 2009. The pumping of Wells 2 and 10 will not impair the potential source of the Haynie application because the spring source is not in hydraulic continuity with the aquifer source of Wells 2 and 10.

Water Availability

Wells 2 and 10 are located along the shoreline of Lake Cushman. The wells are completed in aquifers that are in direct hydraulic continuity with Lake Cushman based on groundwater and lake level correlation. The ground water supply is readily available due to the hydraulic continuity with Lake Cushman and the fact that the drainage basin for the North Fork Skokomish River receives abundant rainfall. Therefore, the water is physically available.

There are no closures on surface water bodies in WRIA 16 and no impairment of senior water right holders is expected. Therefore, groundwater is legally available for appropriation.

Public Interest Considerations

RCW 90.03.290 requires that a proposed appropriation not be detrimental to the public interest.

The 1971 Water Resources Act provides the most comprehensive list of legislative policies that guide the consideration of public interest in the allocation of water. These policies generally require a balancing of the state’s natural resources and values with the state's economic well-being. Specifically, the policies require allocation of water in a manner that preserves instream resources, protects the quality of the water, provides adequate and safe supplies of water to serve public need, and makes water available to support the economic well-being of the state and its citizens.

The year-round withdrawal of 560 gpm and 158 acre-feet per year of water for multiple domestic use is consistent with state policy without adversely impacting instream flows or other public needs and values. No detriment to public interest could be identified during the examination of the subject application.

Consideration of Protests and Comments

No protests were received during the public notice period. A Settlement Agreement between Tacoma Power and other entities that hold stakes in the water, habitat and environment resources of the North Fork Skokomish River has led to several plans and strategies to preserve and monitor the water resources.

CONCLUSIONS

Water must be available

Lake Cushman System 3 is located in an area that receives abundant rainfall and groundwater recharge. Results of the groundwater analysis indicate no significant water level drawdown from the pumping of the two wells is expected at distance. It is concluded that sufficient water is available to provide 560 gpm.

No legal constraints to the use of the water by this right were identified, and the water is considered legally available.

There must be no impairment of existing rights

The requested withdrawal is not expected to interrupt or interfere with the availability of water to an existing right.

The water use must be beneficial

Domestic use is considered a beneficial use in accordance with RCW 90.54.020.

The water use must not be detrimental to the public interest.

As described above, this water use is not detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the Application No. G2-29382 be authorized in the amounts and within the limitations listed below and subject to the provisions beginning on Page 2.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial.

- 560 gpm
- 158 acre-feet per year
- Multiple Domestic
- The total withdrawal under water rights G2-01036C and G2-27597C and this permit G2-29382P shall not exceed 560 gallons per minute or 158 acre-feet per year.

Points of Withdrawal

SE¼ of the NW¼ of Section 18, Township 23 North, Range 04 West W.M.
NE¼ of the SW¼ of Section 18, Township 23 North, Range 04 West W.M.

Place of Use

As described on Page 1 of this Report of Examination.

Reviewed by: Phil Crane
Phil Crane

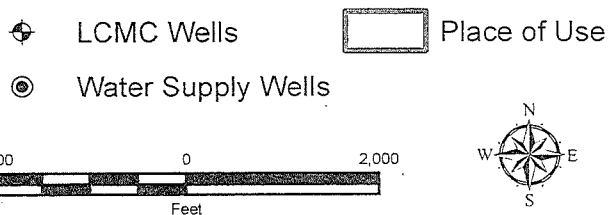
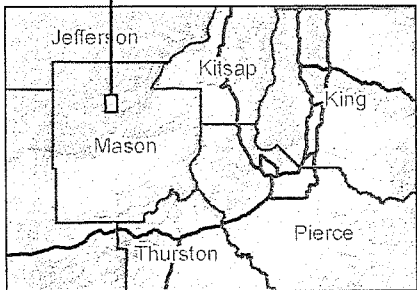
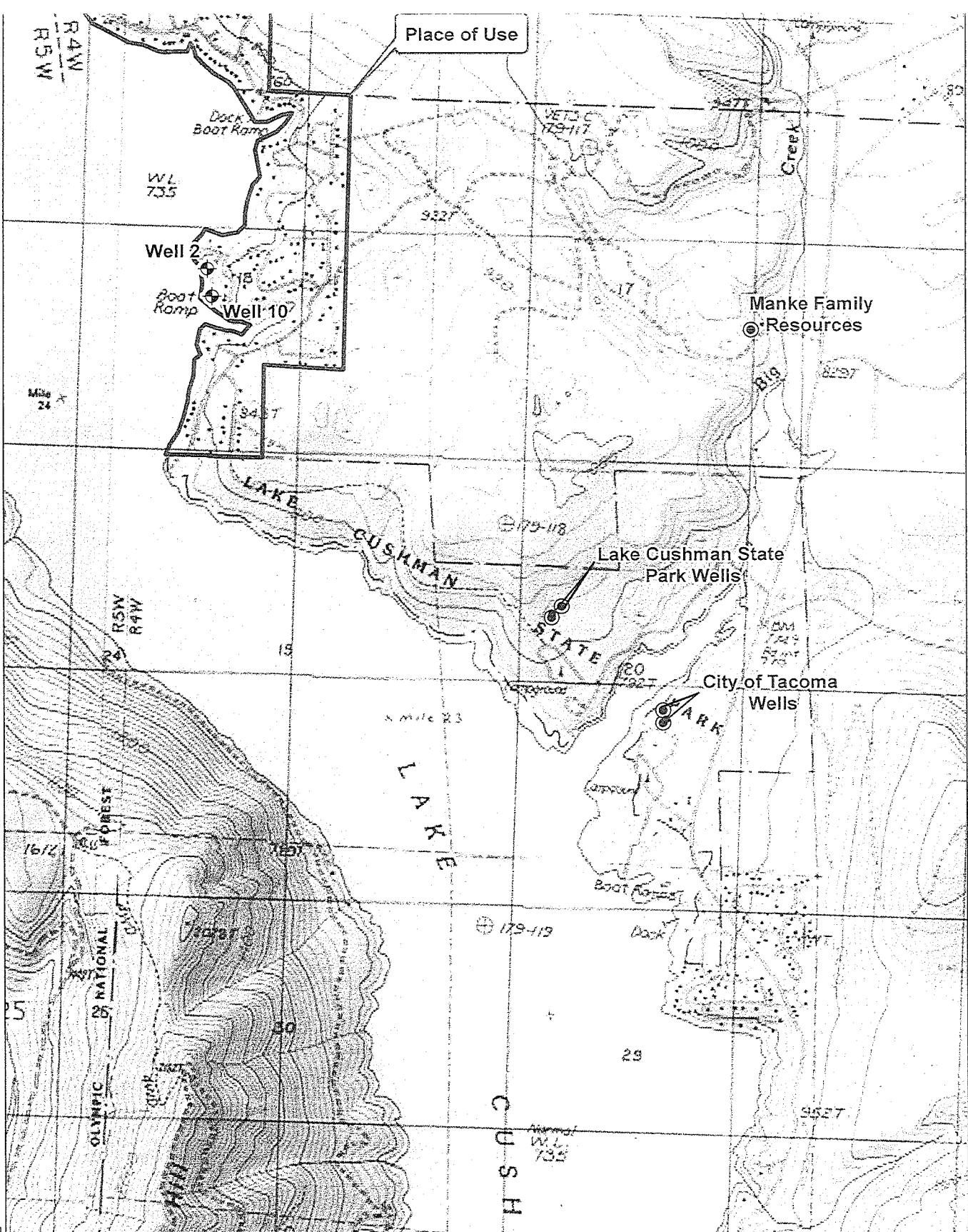
7/14/11
Date

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Map Revised: 11/1/2010 TCK

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Notes:



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